

SCREENING SITE INSPECTION WORK PLAN
FOR

WOODLAND LANDFILL
SOUTH ELGIN, ILLINOIS
U.S. EPA ID: ILD097282750
SS ID: NONE
TDD: F05-8704-044
PAN: FILO193GA

D.2
US EPA RECORDS CENTER REGION 5



547985

938788

SEPTEMBER 13, 1989

Elements of this Screening Site Inspection Work Plan are considered confidential and pre-decisional in nature. Material and information contained within this report may not be released without the approval of the United States Environmental Protection Agency Region V Pre-Remedial Unit.



ecology and environment, inc.

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WORK PLAN

SITE INSPECTION WORK PLAN

THIS DOCUMENT IS CONFIDENTIAL. Due to the predecisional nature of this document, this document and its attachments are not to be released without prior approval of the United States Environmental Protection Agency (U.S. EPA).

This site inspection work plan (VP) has been prepared by Ecology and Environment, Inc., or its subcontractor, C. C. Johnson and Malhotra, P.C., under the field investigation team (FIT) contract with U.S. EPA (No. 68-01-7347).

The objectives of this VP are to:

- o Prepare a preliminary Hazard Ranking System (HRS) score using HRS 1 (40 CFR 300, July 16, 1982) criteria based on existing file information (Part C of VP);
- o Prepare projected HRS 1 scores based on experience and professional judgement (Part C of VP);
- o Provide HRS factor values using the revised HRS 2 (Federal Register proposed date, April 1988) criteria (Part D of VP);
- o Identify HRS 1 score data gaps (Part F of VP); and
- o Propose site inspection activities to satisfy the HRS 1 score data gaps; technical approach and estimated LOE are provided (Parts F and J, respectively).

Unless otherwise stated, QA/QC protocol for site inspection activities are documented in the Quality Assurance Project Plan Region V FIT Conducted Site Inspections - May 1, 1987.

Note: This Work Plan has been prepared following the HRS model currently in use. Revisions will be made to bring the VP in agreement with the revised HRS requirements after promulgation in October 1988.

A. GENERAL INFORMATION

CERCLIS SITE NAME: Woodland Landfill
ALSO KNOWN AS: _____
FORMERLY KNOWN AS: _____
ADDRESS: Rt 25 & Gilbert Rd.
CITY: South Elgin
STATE: Illinois
COUNTY: Kane
ZIP CODE: 60177
U.S. EPA ID: IL0 097282750
SSID: _____
TDD: F85-8704-044
PAN: FIL 0193 GA

FIT USE ONLY

WORK PLAN TYPE: X SCREENING SITE INSPECTION (SSI) WORK PLAN

OTHER: _____

PREPARED BY: Michael Phillips (FIT) DATE: 8-10-89

REVIEWED BY: Robert Smith (FIT) DATE: 8-29-89

APPROVED BY: M. Martin (FIT) DATE: 9/13/89

U.S. EPA USE ONLY

REVIEWED BY: _____ (U.S. EPA) DATE: _____

___ WORK PLAN APPROVED. Recommend issuance of TDD to implement the Work Plan.

___ WORK PLAN APPROVED. No Further Remedial Action Planned (NFRAP).

___ WORK PLAN REJECTED.

COMMENTS: _____

B. SITE INFORMATION

This section of the VP presents current and historic information pertaining to the site, including: site operations, storage/disposal methods, site property area, site status, owners and operators, permit information, and response/enforcement activities. A site location map is shown on Figure 1, located in Section 2.

1. Site Operations (past and present; check all that apply):

<input type="checkbox"/> Above ground storage <input type="checkbox"/> Below ground storage <input type="checkbox"/> Chemical manufacturer <input type="checkbox"/> Drum recycler <input type="checkbox"/> Electroplater <input type="checkbox"/> Foundry <input type="checkbox"/> Incinerator <input type="checkbox"/> Landfarm <input checked="" type="checkbox"/> Landfill <input type="checkbox"/> Midnight dump	<input checked="" type="checkbox"/> Mining site <input type="checkbox"/> Open dump <input type="checkbox"/> Ore processor <input type="checkbox"/> Physical/chemical treatment <input type="checkbox"/> Recycler/reclaimer <input type="checkbox"/> Surface impoundment <input type="checkbox"/> Underground injection <input type="checkbox"/> Well field <input type="checkbox"/> Wood preserver <input type="checkbox"/> Other: _____
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References: 4, 5, 8, 11, _____

2. Storage/Disposal Methods (past and present; check all that apply):

	Waste Quantity (amount/units of measure)
<input type="checkbox"/> Drums, above ground	_____
<input type="checkbox"/> Landfarm	_____
<input checked="" type="checkbox"/> Landfill	<u>Unknown (possibly > 1 million yd³/yr)</u>
<input type="checkbox"/> Open dump	_____
<input type="checkbox"/> Piles	_____
<input type="checkbox"/> Surface impoundment	_____
<input type="checkbox"/> Tank, above ground	_____
<input type="checkbox"/> Tank, below ground	_____
<input type="checkbox"/> Other: _____	_____

References: 4, _____, _____, _____, _____

3. Site Property Area: 200 (est.) (acres)

References: 8, _____, _____, _____, _____

4. Site Status: X Active _____ Inactive

References: 4, 8, 11, _____, _____

5. Owner/Operator History

Current Owner

Name: Waste Mgt of Illinois, Inc.

Address: _____

PO Box 563
City, State, Zip Code: Palos Heights,
IL, 60463

Years of Ownership: ? - present

Current Operator

Name: Waste Management of Illinois

Address: PO Box 563

City, State, Zip Code: Palos
Heights, IL 60463

Type of Operation: landfill

Years of Operation: 1976-present

Previous owners

(list most recent first)

Name: Unknown

Address: _____

City, State, Zip Code: _____

Years of Ownership: Unknown

Previous operators

(list most recent first)

Name: Unknown

Address: _____

City, State, Zip Code: _____

Type of Operation: gravel mine

Years of Operation: - 1944

Name: _____

Address: _____

City, State, Zip Code: _____

Years of Ownership: _____

Name: _____

Address: _____

City, State, Zip Code: _____

Type of Operation: _____

Years of Operation: _____

References: 4, _____, _____, _____, _____

6. Permit Information

Effective Date

Expiration Date

____ NPDES

____ UIC

____ AIR

____ RCRA, PART A PART B

____ SPCC PLAN 1976-23-OP

____ STATE (specify): 1983-18-OP

____ LOCAL (specify): _____

____ OTHER (specify): _____

____ NONE

Dec. 8, 1976

March 17, 1986

unknown

unknown

References: 11, _____, _____, _____, _____

7. Response Activities (previous and current site remediation; check all that apply):

<input type="checkbox"/> Water supply closed	<input type="checkbox"/> Cutoff trenches/sump
<input type="checkbox"/> Temporary water supply provided	<input type="checkbox"/> Subsurface cutoff wall
<input type="checkbox"/> Permanent water supply provided	<input type="checkbox"/> Barrier wall constructed
<input type="checkbox"/> Spilled material removed	<input type="checkbox"/> Capping/covering
<input type="checkbox"/> Contaminated soil removed	<input type="checkbox"/> Bulk tankage repaired
<input type="checkbox"/> Waste repackaged	<input type="checkbox"/> Grout curtain constructed
<input type="checkbox"/> Waste disposed elsewhere	<input type="checkbox"/> Bottom sealed
<input type="checkbox"/> On-site burial	<input type="checkbox"/> Gas control
<input type="checkbox"/> In situ treatment	<input type="checkbox"/> Fire control
<input type="checkbox"/> Encapsulation	<input type="checkbox"/> Leachate treatment
<input type="checkbox"/> Emergency waste treatment	<input type="checkbox"/> Area evacuated
<input type="checkbox"/> Cutoff walls	<input type="checkbox"/> Access to site restricted
<input type="checkbox"/> Emergency diking/surface water diversion	<input type="checkbox"/> Population relocated

Other remedial and enforcement activities: Tri-County
landfill, adjacent immediately to the east
has shown observed release to the surface
and groundwater pathways and has been placed
on the NPL

References: 4, 8, 11, _____

8. Site History/Description and Unusual Features: (see following page.)

References: 4, 8, 11, _____

9. Documented and Alleged Target Compounds

Documented and alleged target compounds are compiled in Table 1. The documented target compounds are supported by analytical data from previous sampling projects. The alleged target compounds are based on the history of site operations and professional judgement. Documented and alleged target compound locations are shown on Figure 2, located in Section 2.

SITE HISTORY (Continued)

The site was a gravel mining operation until the 1940's. The site began operation as a landfill in 1976.

The site is located on a waterway and adjacent to a wetlands, as well as adjacent to a residential area. Two layers of silty clay till underlie the site. Waste Management of Illinois owns and operates the site. The site design, by Patrick Engineering includes: a leachate collection system, a methane collection system with flares, compacted clay side seals and dike, and compacted clay bottom seals. The site is surrounded by a monitoring well network. Located immediately east of the site is the closed Tri-County Landfill, a NPL site that has shown observed release to the groundwater and surface water pathways.

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E. WORK SUMMARY

Based on the preliminary and projected HRS scores, a site inspection will be performed.

The objectives of the site inspection are to:

- o Provide information to satisfy HRS data gaps;
- o Develop the information base needed to permit U.S. EPA to evaluate the need for future site activities; including: immediate removal measures, additional investigation, or no further action; and
- o Characterize hazardous substances, pollutant dispersal pathways, types of receptors, facility management practices, and potentially responsible parties.

Specific tasks to be conducted during the site inspection are (check all that apply):

- ☒ Interview site owner(s)/representative(s)
- ☒ Take photographs of site and surrounding areas
- ☒ Screen site with safety instrumentation (i.e., HNU, OVA, O₂ meter, explosimeter, radiation detector, cyanide detector)
- ☒ Collect environmental samples
- ☒ Assess the need for Immediate Removal Actions
- ☐ FASP*
- ☐ Soil gas monitoring*
- ☐ Well point installation*
- ☐ Geophysics*: _____ (Specify)
- ☐ OTHER*: _____

* Rationale for these activities and their impact on HRS data gaps:

F. PROPOSED SAMPLE PLAN

The HRS data gaps are identified in this section, and a proposed sample plan is developed based on the type of information required.

1. A) HRS data gap(s): Waste Characteristics

B) Sampling proposed to satisfy HRS data gap(s):

X Soil Sediment GW SW Air Waste
(10)

C) Sampling procedures (number and types of samples; equipment; methodology): Nine (9) soil samples and a background will be obtained using stainless steel bowls, trowels, and spoons. Three samples will be taken at depth, the remaining samples will be surface samples. Landfill cover will not be penetrated. Samples will be taken from stained soils, near leachate seeps, or from topographic lows.

A table of proposed sample descriptions is presented in Table 2, Section 1. A proposed sample location map is presented on Figure 3 in Section 2.

2. A) HRS data gap(s): Observed release to groundwater

B) Sampling proposed to satisfy HRS data gap(s):

 Soil Sediment X GW SW Air Waste
(6 wells)

C) Sampling procedures (number and types of samples; equipment; methodology): Six monitoring wells (on-site) will be sampled, one blank and one duplicate will also be obtained. To sample monitoring wells, stainless steel bailers will be used. Monitoring well samples will be filtered prior to shipping to Contract lab.

A table of proposed sample descriptions is presented in Table 2, Section 1. A proposed sample location map is presented in Figure 3, in Section 2.

Note: Sample locations and/or the number of samples may be changed or eliminated at the discretion of the site team leader in response to actual site conditions during the course of the inspection.

F. PROPOSED SAMPLE PLAN

The HRS data gaps are identified in this section, and a proposed sample plan is developed based on the type of information required.

3 A) HRS data gap(s): Observed release to surface water.

B) Sampling proposed to satisfy HRS data gap(s):

 Soil Sediment GW SW Air Waste

C) Sampling procedures (number and types of samples; equipment; methodology): The surface water pathway will not be sampled at this time.

A table of proposed sample descriptions is presented in Table 2, Section 1. A proposed sample location map is presented on Figure 3 in Section 2.

4 A) HRS data gap(s): Observed release to air

B) Sampling proposed to satisfy HRS data gap(s):

 Soil Sediment GW SW Air Waste

C) Sampling procedures (number and types of samples; equipment; methodology): Air monitoring will not be obtained during the inspection

A table of proposed sample descriptions is presented in Table 2, Section 1. A proposed sample location map is presented in Figure 3, in Section 2.

Note: Sample locations and/or the number of samples may be changed or eliminated at the discretion of the site team leader in response to actual site conditions during the course of the inspection.

LOCATION	MATRIX (✓)							RATIONALE FOR DETERMINING SAMPLE LOCATION	PARAMETERS ¹					
	SOIL	SED	GW	SW	AIR	WSTE	OTHR		A/B/H	Pest/ PCB	VOA	METAL	CN ⁻	OTHER
MW1			X					Observed Release to Groundwater ↓	X	X	X	X	X	
MW2			X						X	X	X	X	X	
MW3			X						X	X	X	X	X	
MW4			X						X	X	X	X	X	
MW5			X						X	X	X	X	X	
MW6			X						X	X	X	X	X	
DUP			X					Duplicate	X	X	X	X	X	
BLK							X	Distilled water blank: Lab QA/QC	X	X	X	X	X	
S1	X							Waste characteristics ↓	X	X	X	X	X	
S2	X								X	X	X	X	X	
S3	X								X	X	X	X	X	
S4	X								X	X	X	X	X	
S5	X								X	X	X	X	X	
S6	X								X	X	X	X	X	
S7	X							Background soil characteristics ↓	X	X	X	X	X	
S8	X								X	X	X	X	X	
S9	X								X	X	X	X	X	
S10	X								X	X	X	X	X	
TOTALS	10		7				1							

¹Target Compound List Attached


Table 2
PROPOSED SAMPLE DESCRIPTIONS
(INCLUDING ALL LABORATORY BLANKS AND DUPLICATES)

G. COMMENTS

The former Tri-County Landfill, an NPL site with documented contamination to both surface water and groundwater pathways is located immediately adjacent to the east of Woodland Landfill. Groundwater flow is from east to west. The upgradient background samples may contain high levels of contaminants, this could make an observed release difficult to document. Additional on-site monitoring wells may have to be sampled.

H. HEALTH AND SAFETY

Proposed E & E Health and Safety protocol to be followed during site inspection.

1. Anticipated level of protection: _____ A _____ B  _____ C ☒ D
2. Level of protection modifications: Possible upgrade to level C if monitoring equipment indicates an increased hazard.
3. Work limitations (time of day, etc.): Work during daylight hours only; monitor for heat/cold stress as site conditions warrant; maintain buddy system.

I. TYPE OF DELIVERABLE

Proposed report format to be submitted to U.S. EPA.

1. ☒ SSI Report including U.S. EPA 2070-13 Form
2. ☐ Letter Report
3. ☐ Other _____

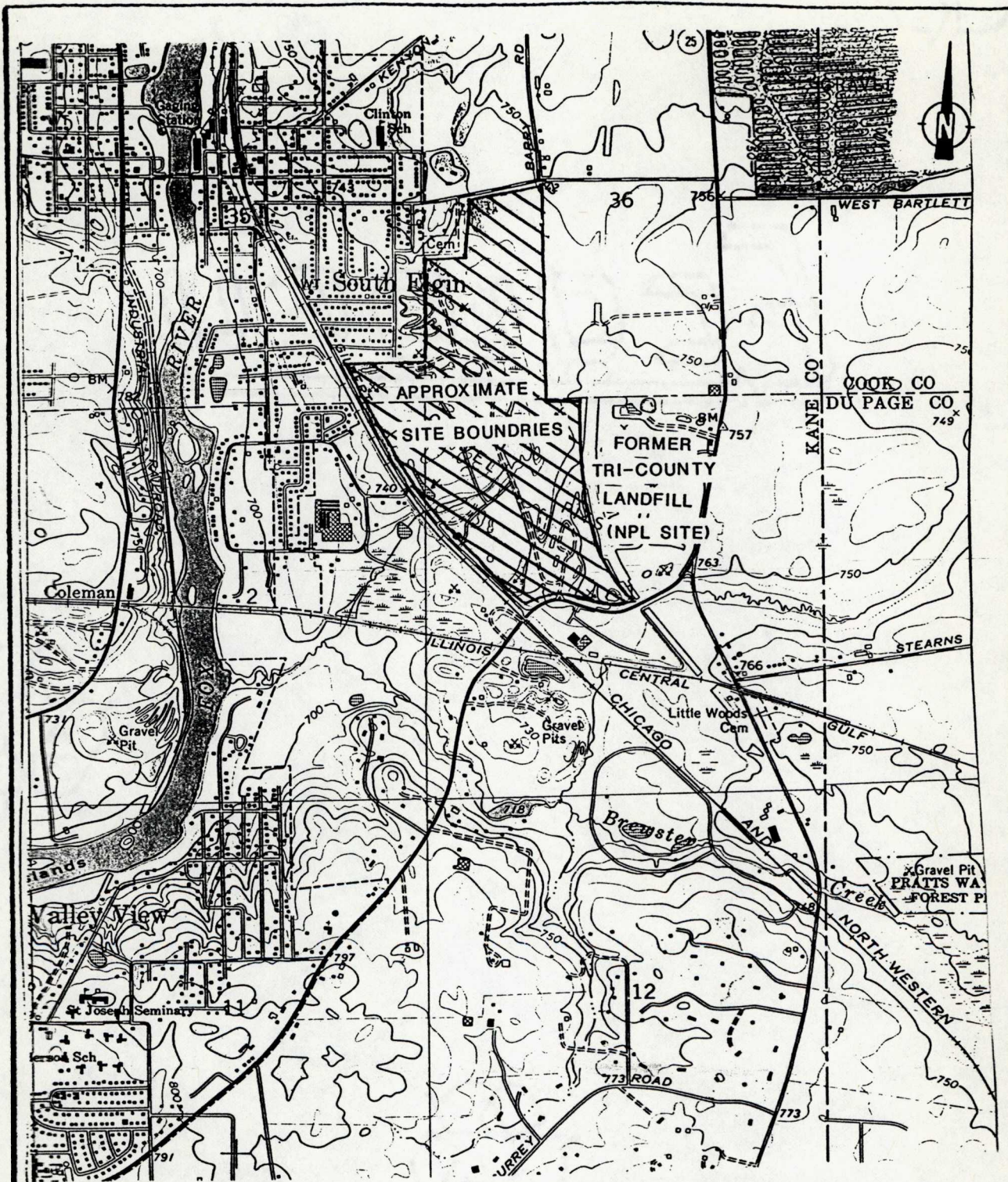
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SITE MAPS

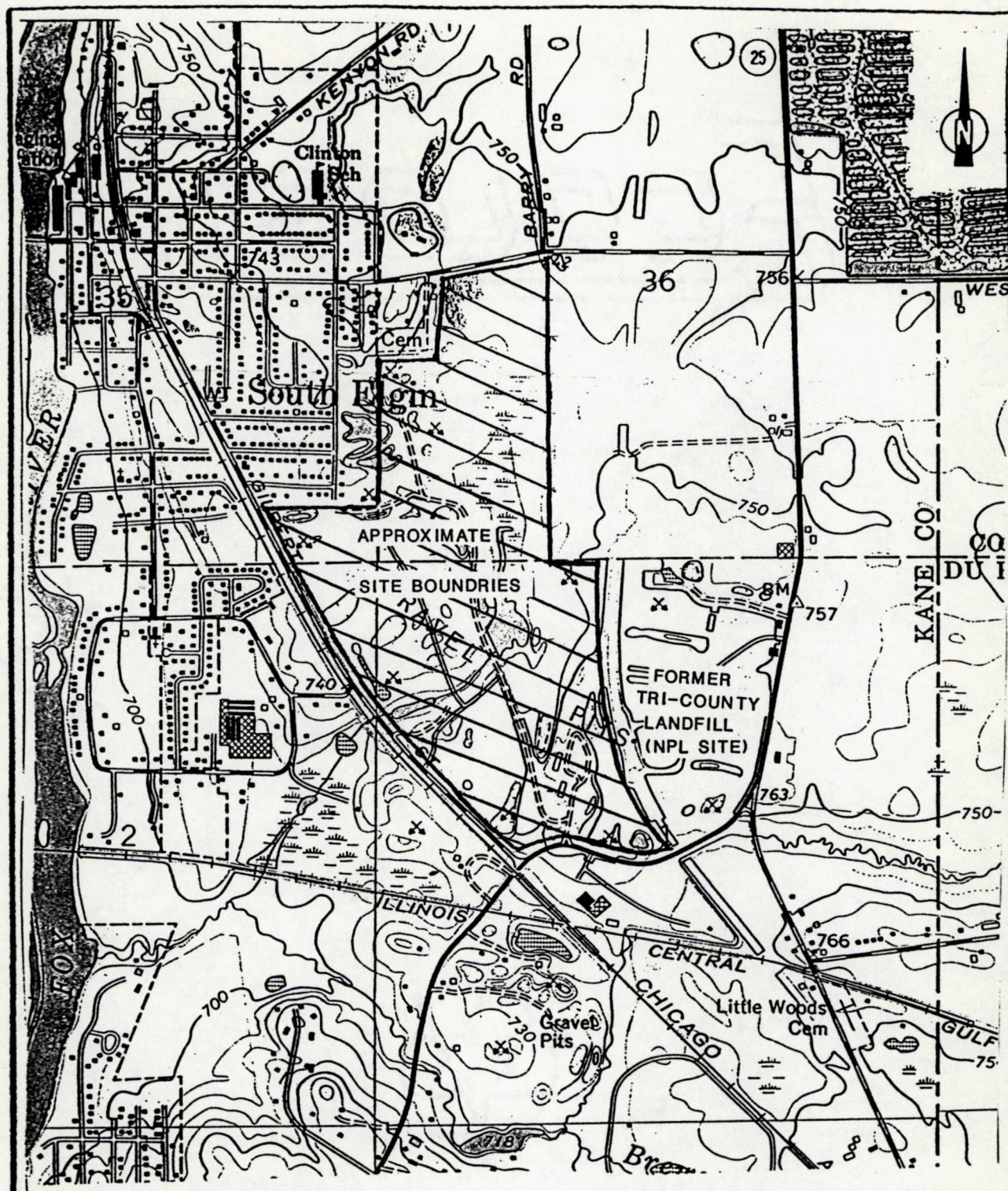
SITE MAPS



1. SITE LOCATION MAP (TOPO)
2. DOCUMENTED/ALLEGED
TARGET COMPOUND MAP
3. PROPOSED SAMPLE
LOCATION MAP

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TITLE	FIGURE #
SITE	SCALE
CITY	STATE
SOURCE	DATE

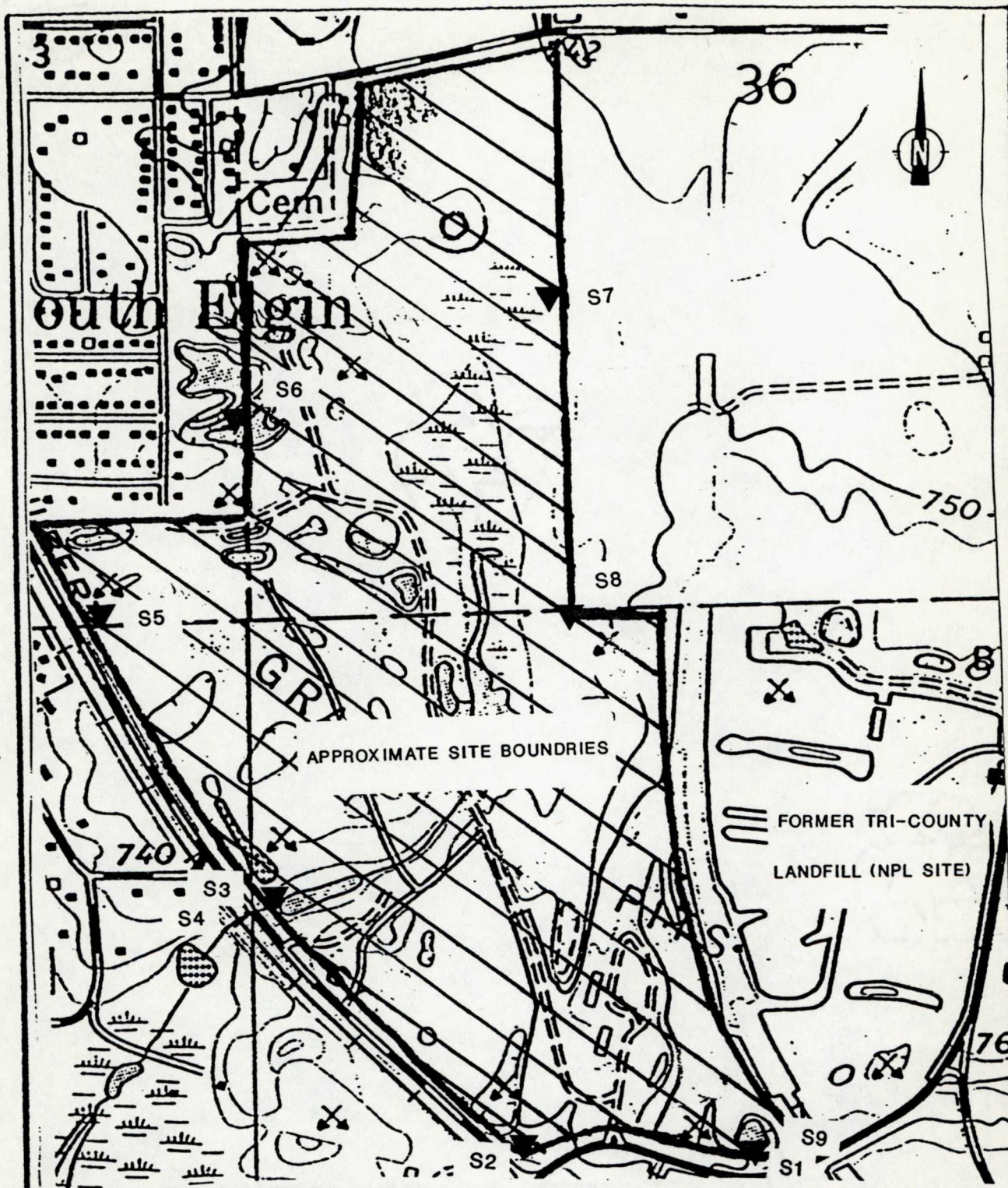


 <p>QUADRANGLE LOCATION</p>		<p>ecology and environment, inc. <small>111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604 TEL. 312/453-1116</small></p>	
<p>TITLE</p> <p>SITE LOCATION MAP</p>		<p>FIGURE #</p> <p>1</p>	
<p>SITE</p> <p>WOODLAND LANDFILL</p>		<p>SCALE</p> <p>1:24,000</p>	
<p>CITY</p> <p>SOUTH ELGIN, IL</p>		<p>P.L.N.</p> <p>FILO193GA</p>	
<p>SOURCE</p> <p>USGS TOPO. MAP</p>		<p>DATE</p> <p>REVISED</p>	



LEGEND	
	DOCUMENTED AREA OF CONTAMINATION
	ALLEGED AREA OF CONTAMINATION
(A) LETTERED ITEMS CORRESPOND TO TABLE 1	

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TITLE	DOCUMENTED/ALLEGED TARGET COMPOUND MAP		FIGURE # 2
SITE	WOODLAND LANDFILL		SCALE UNKNOWN
CITY	SOUTH ELGIN,	STATE IL	P.A.N. FILO193GA
SOURCE	USGS TOPO. MAP		DATE
			REVISED



LEGEND
 [Solid black box] DOCUMENTED AREA OF CONTAMINATION

[Hatched box] ALLEGED AREA OF CONTAMINATION

▼ SOIL/SEDIMENT

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TITLE
 PROPOSED SOIL/SEDIMENT
 SAMPLE LOCATION MAP

FIGURE #

3

SITE
 WOODLAND LANDFILL

SCALE

UNKNOWN

CITY
 SOUTH ELGIN, ILL.

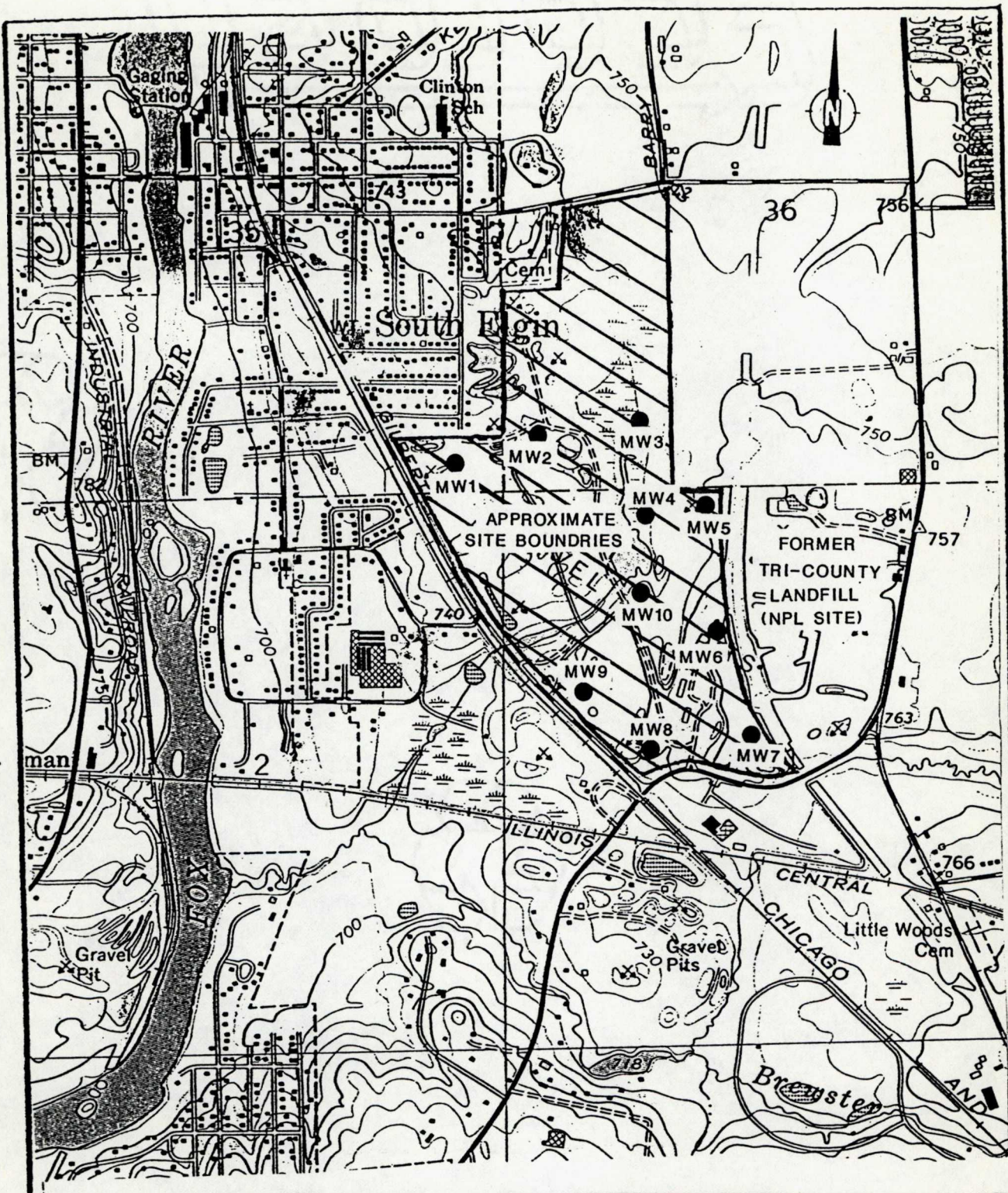
P.L.N.


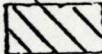

FIL0193GA

SOURCE
 USGS TOPO. MAP

DATE

REVISED



LEGEND  DOCUMENTED AREA OF CONTAMINATION  ALLEGED AREA OF CONTAMINATION  MONITORING WELLS		ecology and environment, inc. 111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604 TEL. 312.463-4116	
TITLE PROPOSED GROUNDWATER SAMPLE LOCATION MAP		FIGURE # 4	
SITE WOODLAND LANDFILL		SCALE UNKNOWN	
CITY SOUTH ELGIN, IL		P.A.N. FILO193GA	
SOURCE USGS TOPO. MAP		DATE REVISED	

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APPENDIX

Copies of the following addenda have been supplied to the U.S. Environmental Protection Agency and the appropriate state agencies. Refer to these addenda when reviewing this work plan.

Addendum

Title

A

Routine Analytical Services
Contract Required Detection and
Quantitation Limits

B

Central Regional Laboratory
Detection Limits

C

Special Analytical Services Detection Limits
Drinking Water Samples

D

Special Analytical Services Detection Limits
High Concentration Samples

REFERENCES

SOURCES AND DATES OF INFORMATION COLLECTION

<u>SOURCE</u>	<u>DATE</u>
1) State Hazardous/Solid Waste Files	<u>7/88</u>
2) State Water Files	_____
3) State Air Files	_____
4) State Department of Health	_____
5) State Geological Survey	_____
6) State Department of Natural Resources	_____
7) State Fire Marshall	_____
8) County Department of Health	_____
9) County Engineer	_____
10) County Clerk/Recorder of Deeds	<u>7</u>
11) City Department of Health	_____
12) City Engineer	_____
13) City Fire Department/Fire Marshall	_____
14) City Water/Sever Department	<u>2/15+16/88 + 8/22/84</u>
15) U.S. Soil Conservation Service	_____
16) Others	_____
_____	_____
_____	_____
_____	_____
_____	_____
STATE CONTACT(S): _____	_____
(name)	(phone number)
_____	_____
(name)	(phone number)

REFERENCE DOCUMENTATION SHEET

Ref. #	DESCRIPTION OF REFERENCE
1	<p>Rainfall Frequency Atlas, U.S. Dept. of Commerce, 1963, Gov't. Printing Office, Washington, D.C., Technical Paper #40,</p>
2	<p>Climatic Atlas of the United States, U.S. Dept. of Commerce, 1968, Gov't Printing Office, Washington D.C., pp. 48 & 63</p>
3	<p>1980 Census of Population, U.S. Dept. of Commerce, Gov't Printing Office, Washington, D.C..</p>
4	<p>U.S. EPA Potential Hazardous Waste Site Preliminary Assessment, Woodland Landfill, South Elgin, IL, 1983</p>

REFERENCE DOCUMENTATION SHEET

Ref. #	DESCRIPTION OF REFERENCE
5	USGS Topographic Maps, 7.5' series, Elgin, IL; West Chicago, IL; Streamwood, IL; Geneva, IL; 1964 (rev. 1972, 1980)
6	Endangered and Threatened Species of Illinois, Status and Distribution, Illinois Dept. of Conservation, 1981
7	Illinois Travel and Recreation Guide, Rockford Map Publishers, 1983.
8	Woodland Landfill II, Kane County, IL, Application to IEPA to Develop Site, Patrick Engineering for Waste Management, 1983

REFERENCE DOCUMENTATION SHEET

Ref.#	DESCRIPTION OF REFERENCE
9	Hydrogeologic Evaluation, Letter from ISGS to Kane Co. Environmental Division, Aug. 27, 1982
10	Telephone Logs, Karl Von Heimburg (E+E) ²⁻¹⁶⁻⁸⁸ with Dave Knight (Village of South Elgin), ²⁻¹⁵⁻⁸⁸ F. Fabreys (Baxter & Woodman, Inc), ²⁻¹⁵⁻⁸⁸ K. Eselman (Elgin Water Dept.), ²⁻⁴⁻⁸⁸ M. Smith (South Elgin Water Dept.); ⁸⁻²²⁻⁸⁴ Dan Sewall (E+E) with Mike Niemy (St Charles Skyline Sewer & Water Co. re: Valley View)
11	IEPA Site Inspection Reports, 1973 - 1986, Woodland Landfill
12	IEPA Memo from Bob Koch, March 29, 1978